2014 Annual Drinking Water Quality Report

Orosi Public Utility District

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 – December 31, 2014.

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you with a safe and dependable supply of drinking water. Our water source comes from five wells, Well Nos. 4, 5A, 7, 8 and 10. Well No. 6 is inactive. Chlorination is provided on each well.

A source water assessment was conducted for the water supply wells of the Orosi Public Utility District water system in November 2002. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: fertilizer, pesticide and/or herbicide applications. The source is considered most vulnerable to the following activities not associated with any detected contaminants: septic systems – low density; fleet and/or truck and/or bus terminals; automobile gas stations; sewer collection systems; agricultural and/or irrigation wells; underground storage tanks – confirmed leaking tanks. A copy of the complete assessment may be viewed at the District office. If you would like a summary of the assessment sent to you or if you have any questions about this report or concerning your water utility, please contact Mr. Raul Mariscal, Foreman, at 12488 Avenue 416, Orosi, CA or phone 559/528-4262.

We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the 2nd Tuesday of each month at 6:30 p.m., at the District office, 12488 Avenue 416, in Orosi.

The following are definitions of some of the TERMS USED IN THIS REPORT:

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Primary Drinking Water Standards (PDWS): MCLs or MRDLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of drinking water. Supplies with elevated SDWS do not affect the health at the MCL levels.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: State Water Resources Control Board – Division of Drinking Water (DDW) permission to exceed an MCL or not comply with a treatment technique under certain conditions.

NA: not applicable.

ND: not detectable at testing limit.

ppm: parts per million or milligrams per liter (mg/l).

ppb: parts per billion or micrograms per liter (ug/l).

ppt: parts per trillion or nanograms per liter (ng/l).

pCi/l: picocuries per liter (a measure of radiation).

In general, sources of drinking water (both tap water and bottled water) may include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

Constituents that may be present in source water to contamination levels include:

- *Microbial contaminants*, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- *Pesticides and herbicides* may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- *Radioactive contaminants* that can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U. S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board – Division of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Orosi Public Utility District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The table below and on the following page(s) list all the drinking water constituents that were detected during the most recent samplings for the constituent. The presence of these constituents in the water does not necessarily indicate that the water poses a health risk. The DDW requires us to monitor for certain constituents less than once per year because the concentrations of these constituents are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are therefore more than one year old.

SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Contamination
Total Coliform Bacteria	2	0	More than 1 sample in a month with a detection	0	Naturally present in the environment

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

The new Federal Ground Water Rule requires that each groundwater source must be sampled when a routine distribution bacteriological sample shows the presence of coliform bacteria. Coliforms were found in samples taken during August and October, 2014, and this was a warning of potential problems. No reason for the detection could be found and subsequent testing indicated no presence of coliforms.

TEST RESULTS (A)

Lead and Copper Rule	No. of samples collected	MCLG	Action Level	90th percentile level detected	No. Sites Exceeding Action Level	Typical Source of Contamination
Lead (ppb) 2014	20	2	15	ND	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 2014	20	0.3	1.3	0.11	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	MCL	PHG [MCLG]	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Hardness (ppm)	None	None	2012 & 2013	166	120 to 230	Generally found in ground and surface water
Sodium (ppm)	None	None	2012 & 2013	21	18 to 26	Generally found in ground and surface water

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or constituent (and reporting units)	MCL	PHG [MCLG]	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Arsenic (ppb)	10	0.004	2012 & 2013	2.3	2.2 to 3.3	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	1	2	2012 & 2013	0.22	0.1 to 0.67	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2	1	2012 & 2013	0.11	0.11 to 0.17	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as NO3 (ppm)	45	45	2014	23.5	14 to 39 (B)	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

DETECTION OF SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES & HERBICIDES						
Chemical or Constituent (and reporting units)	**MCL**	**PHG [MCLG]**	**Sample Date**	**Average Level Detected**	**Range**	**Likely Source of Contamination**
Dibromochloropropane (DBCP) (ppt)	200	1.7	2012 & 2014	16.8	ND to 44	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit

DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD					
Chemical or Constituent (and reporting units)	**MCL**	**Sample Date**	**Average Level Detected**	**Range**	**Likely Source of Contamination**
Chloride (ppm)	500	2012 & 2013	16	11 to 23	Runoff/leaching from natural deposits; seawater influence
Color (Units)	15	2012 & 2013	< 1	N/A	Naturally-occurring organic materials
Foaming Agents (MBAS) (ppb)	500	2012 & 2013	< 50	N/A	Municipal and industrial waste discharges
Specific Conductance (µS/cm)	1600	2012 & 2013	394	280 to 550	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	2012 & 2013	12	3.5 to 25	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)(ppm)	1000	2012 & 2013	284	220 to 380	Runoff/leaching from natural deposits
Turbidity (Units)	5	2012 & 2013	< 0.1	N/A	Soil runoff

DETECTION OF UNREGULATED CONTAMINANTS						
Constituent	**Notification Level**	**PHG [MCLG]**	**Sample Date**	**Average Level Detected**	**Range**	**Health Effects Language**
Trichloropropane (1,2,3-TCP) (ppt)	5	0.7	2014	5.1	ND to 6	Some people who use water containing 1,2,3-Trichloropropane (TCP) in excess of the Notification Level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

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Disinfection Byproducts and Disinfectant Residuals

Chemical or Constituent (and reporting units)	***MCL [MRDL]***	***PHG***	***MCLG [MRDLG]***	***Sample Date***	***Running Annual Average***	***Range***	***Major Sources in Drinking Water***
TTHM [Total Trihalomethanes] (ppb)	*80*	*N/A*	*N/A*	*10/09/14*	*< 2.5*	*N/A*	*Byproduct of drinking water chlorination*
HAA5 [Haloacetic Acids] (ppb)	*60*	*N/A*	*N/A*	*10/09/14*	*< 6*	*N/A*	*Byproduct of drinking water disinfection*
Chlorine as CL2 (ppm)	*[4.0]*	*N/A*	*[4]*	*2014*	*0.53*	*0.10 to 0.90*	*Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose or stomach discomfort.*

(A) Results reported due to regulatory requirement or detection of a constituent.

(B) ABOUT NITRATE: Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Orosi Public Utility District
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Spanish version available at the Office.

Versión en Español disponible en la Oficina.

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Additional General Information on Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of constituents does not necessarily indicate that the water poses a health risk. More information about constituents, contaminant levels and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1/800/426-4791 or their website http://www.epa.gov/safewater/hfacts.html.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1/800/426-4791.